

# Wickes

**ISSUE 10/08**
**GOOD IDEA  
LEAFLET**


## THE USE & INSTALLATION OF A WICKES SANIPUMP MACERATOR

Have you always wanted an en suite bathroom, or understairs cloakroom but found that the plumbing work and cost involved ruled it out?

The biggest obstacle is likely to be arranging the run of waste pipe to the soil stack, especially when it is on one side of the house, and your proposed new en suite is on the other side.

Installing a Wickes macerator could be your best or only solution!



Most houses are built in such a way that the main 100mm/4" soil stack (the one carrying the waste from W.C.s/bathrooms) is run down one side of the house. Bathrooms and toilets will tend to be on that side of the house, for easy connection to the soil stack.

When you are planning the location of your new loft conversion or en-suite bathroom, the chances are that it will be difficult to run gravity 100mm/4" waste pipes to the soil stack. This will certainly be true in a basement.

The answer is to use a Wickes Sanipump Macerator which, as our cut-away diagram at the end of this leaflet shows, can be located almost anywhere. The Macerator is a neat, unobtrusive white unit which sits behind the W.C. pan. It reduces the waste to liquid form and automatically pumps it away to the soil pipe or drain in 32mm/1<sup>1</sup>/<sub>4</sub>" pipework. It will pump away the waste from a W.C., washbasin, shower or bidet, up to 3.5m vertically or 45m horizontally. It cannot be used to pump water from a kitchen sink, a sink waste disposal unit or a washing machine or dishwasher.

### KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes booklet, call our Freephone number which is:  
**0500 300 328**
- Visit our website on [www.wickes.co.uk](http://www.wickes.co.uk)

### Main features of the Wickes Macerator are:-

- Complies with EN-12050-3
- Complies with EN 60335-1
- BBA approved, Certificate No.87/1853
- CE marked
- Satisfies Building Regulations requirements
- Small unit designed to fit unobtrusively behind any horizontal outlet W.C. pan including a close coupled suite
- Supplied with flexible spigot connector

- Automatic operation via internal pressure switch activated by the level of effluent in the unit discharge chamber
- 500 watt motor protected by thermal cut-out with one metre of flex
- Pumps all waste to the main soil stack through 32mm pipe
- Can pump up to 3.5 metres vertically or 45 metres horizontally at 38 litres per minute
- Accepts waste from W.C., basin, shower etc. Can be W.C. only or other waste water only, or both
- Maintenance free motor
- Maceration by rotating stainless steel grater which is considered to be indestructible and everlasting
- Quiet in operation being comparable to the noise of a normal cistern filling
- Carries 2 year guarantee
- Supplied complete with 32mm discharge bend with non-return valve, fixing clip, 38mm waste connector with non-return valve

- An Optional Extra non-return valve (**See FIG.1**) can be purchased from our helpline.

Product Description	Product Code	I NEED
White Macerator Unit supplied complete with 32mm discharge bend with built-in non-return valve, jubilee fixing clip and 38mm waste connector with non-return valve.	404-470	
32mm Solvent weld waste pipe - 2m	431-981	
32mm Solvent weld straight couplings	431-991	
32mm Solvent weld 92.5° swept bends	431-992	
32mm Solvent weld 135° bends	431-993	
32mm Pipe brackets Pk2	431-920	
32mm Boss adaptor to soil stack	431-950	
Solvent Cement	431-964	
38mm Push-fit waste pipe - 2m	431-900	
32mm Push-fit waste pipe - 2m	431-901	
38mm-32mm reducer bush	431-911	
32mm Push-fit bends	431-922	
32mm Push-fit straight pipe couplers	431-921	
32mm Push-fit Tees	431-924	
32mm Push-fit 135° bends	431-923	
Shallow bath / shower trap	431-914	
Sink trap	431-927	
Double pole fused connection unit	710-027	

## PROJECT SHOPPING LIST

Some of the items in the shopping list will be needed to complete the project of installing a Wickes Sanipump Macerator. Fill in the 'I NEED' column to make up your own shopping list.

## BEFORE YOU START

No special tools are required but you will need plenty of clean rags when working with the solvent cement. You also require a cleaner for cut pipe ends and the inside of pipe fittings. White spirit is usable but a solvent cleaner is preferable.

### Rules & Regulations.

Current Building Regulations specify that a Sanipump small bore system can be fitted where there is also access to a normal gravity discharging W.C. It should not be installed as the only W.C. facility.

**NOTE:** More comprehensive installation instructions will be supplied with the macerator.

6. Running the waste pipes from sanitaryware to the macerator.
7. Fitting the vent pipe.
8. Final electrical connection.
9. Commissioning the unit.

### 1. PLANNING THE PIPE RUNS.

The Sanipump has a 100mm/4" inlet for the W.C. and another 40mm/1½" inlet on the right hand side for the waste from basin, shower, etc. Note that the waste from a shower tray will necessitate the purchase of the optional shower waste non-return valve.

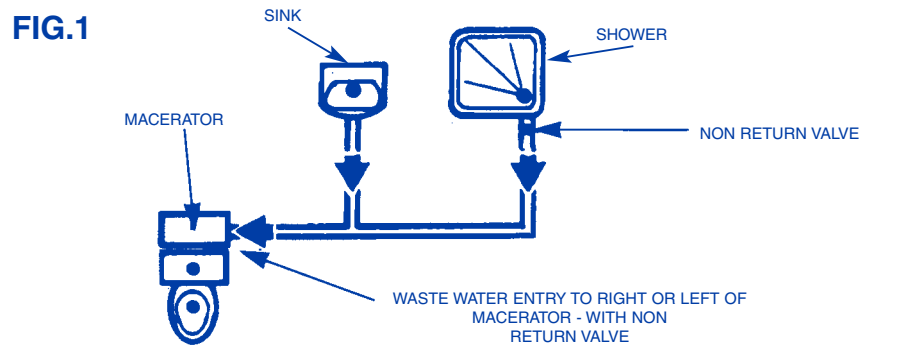
The centre of this entry is approx. 90mm/3½" from the base. With this in mind, you can plan your bathroom etc., with the sanitaryware on the right or left hand side of the unit.

**See FIG.1**

### 2. RUNNING THE HOT / COLD FEED TO SANITARYWARE

Your planned cloakroom/bathroom or en suite facilities will need the appropriate supply from the cold water cistern and hot water cylinder.

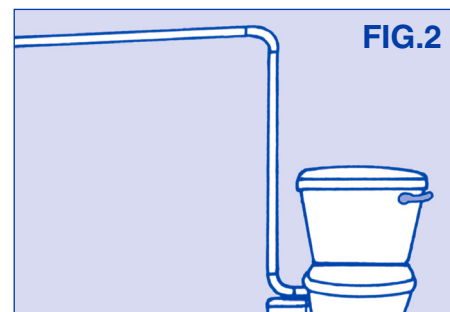
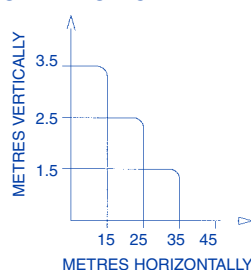
See Good Idea leaflet No. 48 for basic plumbing skills.



## WORK SEQUENCE

1. Planning the pipe runs.
2. Running the hot / cold feed to sanitaryware.
3. Running the waste from the macerator to the soil stack.
4. Running the electric supplies to the macerator.
5. Fitting the macerator to the W.C.

### PERFORMANCE GRAPH



### 3. RUNNING THE WASTE PIPE FROM THE MACERATOR TO THE SOIL STACK.

The Sanipump will pump waste up to 3.5 metres vertically, or 45m horizontally, or a combination of both. 1m vertical is equivalent to 10m horizontal (approx). Where you need to pump vertically upwards always put the rise at the start of the run, and fall from the highest point with a 1:100 fall.

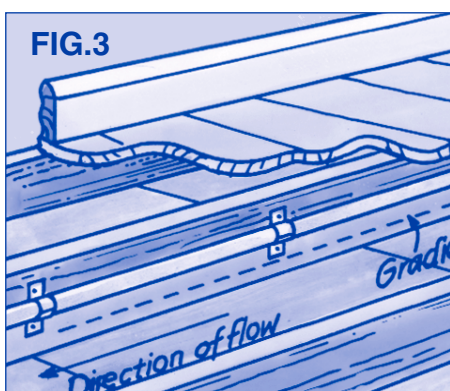
**SEE PERFORMANCE GRAPH.**

All vertical lifts should rise as directly above the unit as possible allowing for the need to bypass the cistern. Any initial horizontal run from the unit prior to a vertical lift should not exceed 300mm.

#### FIG.2

This means that you can quite easily run the pipe up into a loft space above the location of the Macerator and then run it horizontally across to an exit point close to the soil stack. It may be possible to exit from the loft through overhanging eaves. The alternative may be to run it under floorboards provided that flooring/ceiling joists run with, not across, the intended pipe run.

#### FIG.3



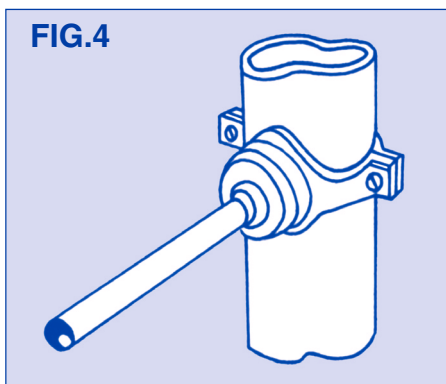
Since the waste is being expelled under pressure, the pipe does not need more than a slight downward slope along its length, a minimum of 1:100 (1 inch per 7' 6").

If the final connection is to an external soil stack, the last 300mm of the pipe run should be a vertical drop to the connection to ensure complete drainage and prevent freezing in winter. All connections on the run from the Macerator to the soil stack are solvent weld types. All bends should be 'swept' rather than sharp angles.

At the soil stack, you will need to cut a hole in the stack and then fit a strap-on boss connector over the hole. The end of the pipe is then solvent welded into the connector.

#### FIG.4

FIG.4



The hole in the soil stack can be made using a 54mm diameter hole saw in the chuck of an electric drill or, if you do not have a hole saw, by drilling a series of small holes in a circle and then cutting out the disc with a pad saw before filing the hole smooth.

### 4. RUNNING THE ELECTRICAL SUPPLY TO THE MACERATOR.

All electrical work must conform to the current IEE Wiring Regulations BS 7671, and Part P of Building Regulations. You are advised to check with your local authority's Building Control Department, or an Authorised Competent Person, before starting. If in any doubt about electrical work, contact a qualified electrician.

The Sanipump should be wired to a fused connection unit and not to a plug and socket. The fused connection unit (see Shopping List for a suitable one) should be unswitched and should be mounted on the wall close to the unit.

The supply to the fused connection unit can be as a spur from the nearest socket outlet run in 2.5m<sup>2</sup> two-core and earth cable. The neatest way to install it will be to flush mount it in a metal box sunk into the wall plaster of a solid wall or a plastic plasterboard box for a hollow partition wall. This particular job is one you will probably do whilst the floorboards are up for laying the Macerator waste pipe.

### 5. FITTING THE MACERATOR TO THE W.C.

The Sanipump is freestanding and is not secured to the wall in any way. It just sits on the floor behind the W.C. pan with sufficient clearance for the unit to be removed for possible maintenance.

The Macerator is supplied with a connector for linking to the pan spigot. To fit the macerator to the pan spigot, smear the spigot with liquid soap and pull the connector over it.

**If the Macerator is not needed to be linked to a W.C. an optional blanking-off plug is available to replace the pan connector. Contact the Helpline number to obtain any optional extras.**

### 6. RUNNING THE WASTE PIPES FROM SANITARYWARE TO THE MACERATOR.

The macerator is supplied with a blanking-off plug fitted to one of the waste water outlets. Only unscrew and remove the plug if you intend to dispose of waste water from other sanitaryware through the Macerator. Replace the plug with the 38mm waste connector with its non-return valve.

Your shower will have 38mm waste fittings. Any basin will have 32mm waste fittings. The main run of the waste piping will therefore be 38mm piping to the Macerator with the basin 32mm pipe feeding into the run via a 38mm - 32mm reducer. All of the run will be made using push-fit pipe and fittings. All these waste pipes must have a gravity slope of 1:40 into the macerator. As stated, to prevent any backflow of waste water from the basin, bidet or bath into a very much lower shower tray the optional extra non return valve is fitted into the waste pipe from the shower tray as close as possible to the waste outlet after the trap. Refer to **FIG.1**

All pipework must be properly supported.

### 7. FINAL ELECTRICAL CONNECTION.

The flex of the Sanipump is connected to the load terminals of the fused connection unit as follows:

Brown to the L terminal  
Blue to the N terminal  
Green / yellow earth to the E terminal  
Fit a 5A fuse to the fused connection unit.

### 8. COMMISSIONING THE UNIT

With all pipework connections made, and the electricity supply turned on, the Macerator is ready for use.

As soon as water enters the main chamber, from the wastepipe inlet or the W.C., an internal pressure switch automatically activates the Macerator. The water is pumped out through the discharge pipe.

Run waste water into system from a bath or basin tap first and check the pipework for leaks from start to finish. Follow this with a similar test after flushing the W.C. You need to be very careful about waste which you put down the W.C. if you have a macerator. **IT WILL NOT HANDLE HARD OBJECTS OR COTTONWOOL FABRIC (E.G. TAMPONS, CONDOMS, WET WIPES) ALSO, AVOID DISPOSAL OF KITCHEN AND HAND TOWELS VIA THE MACERATOR.** You should also avoid aggressive chemicals, like paint stripper, acids or solvents.

Finally, avoid having block cleansers fitted to the W.C. pan, as they tend to fall into the pan and block the unit.

The Sanipump will run for 10 to 20 seconds to clear the flush of a W.C.

To clear a washbasin or shower for example, it will run in 10 second bursts (approx.) until the waste is cleared.

[www.wickesbathrooms.co.uk](http://www.wickesbathrooms.co.uk)

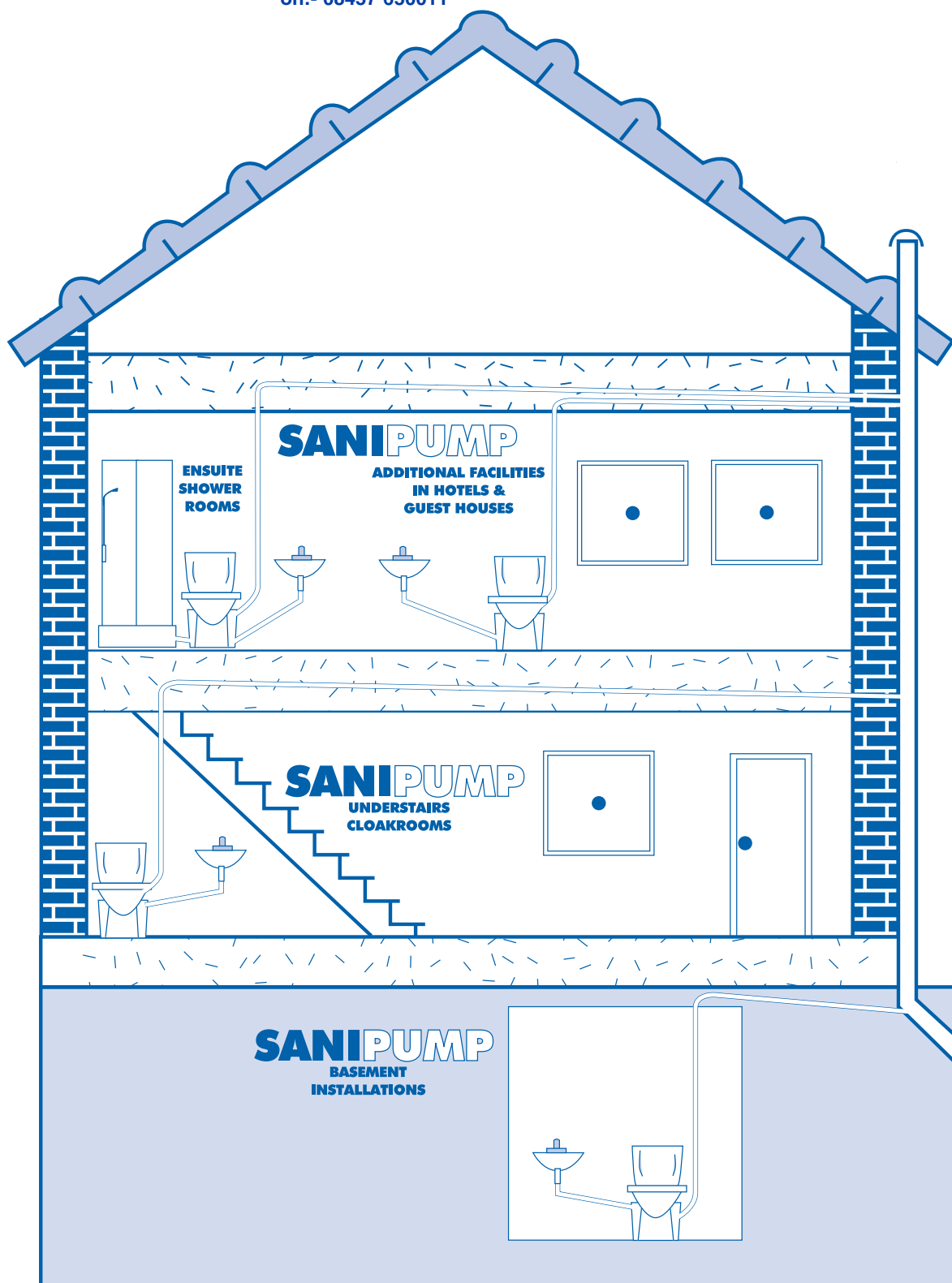
#### MAINTENANCE

Keep the Macerator clean using a standard non-abrasive proprietary cleaner. Bleach used to clean the W.C. will not harm the Macerator.

If the Macerator fails to operate check the 5 amp fuse in the fused connection unit and the relevant fuse or MCB at the main consumer unit.

No other maintenance or servicing can be carried out by the householder.

**In the event of a breakdown or to order optional extras contact our HELPLINE on: 020 8842 4040 or the nationwide service network on:- 08457 650011**



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